

### **REMARKS**

This response is being submitted with the assumption that the proposed claim amendments of August 7, 2009 have been entered as indicated in the Advisory Action dated August 6, 2009. Claims 11 to 28 are pending. Claims 1 to 10 are currently canceled. Claims 12 and 19 are currently amended. Claims 12 and 19 have been amended to recite that the second pressure-sensitive adhesive (PSA) layer comprises a second acrylic polymer, not containing a metal hydrate compound, but containing units derived from a second mixture comprising ....” Support for these amendments can be found, for example, on page 7, line 8 and line 15 of the specification as filed. Additionally, claims 12 and 19 are being amended to clarify that the second PSA layer is in contact with at least a portion of at least one side of the first PSA layer to remove antecedent basis problems. A Request for Continued Examination is being submitted to allow further prosecution. Reconsideration of the application is requested.

### **§ 103 Rejections**

Claims 11 and 26 stand rejected under 35 U.S.C § 103(a) as purportedly being unpatentable over Masaki et al. (JP 10-077308) in view of Akihiro et al. (JP H2000-230162A1). Claims 11 and 26 have been canceled making this rejection mute.

Claims 11-28 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over Masaki et al. (JP 10-077308) in view of Akihiro et al. (JP H2000-230162A1) and Moon et al. (US 4,988,742). Claims 11 and 26 are canceled. It is the Examiner’s position that Masaki discloses a flame-retardant adhesive tape comprising acrylic polymers. It is further the Examiner’s position that Masaki discloses halogen free flame-retardant acrylic pressure-sensitive adhesive tapes that can be formed from a mixture of (meth)acrylic ester monomer and one or more copolymerizable monomers that is [are] copolymerized with the monomer and that the monomers can be selected from carboxyl group containing monomers and/or nitrogen containing monomers. The Examiner asserts that the difference between the claimed invention and Masaki is that Masaki is silent as to teaching weight % of metal hydrate compound, multilayer adhesive tape, the second PSA is present on at least a portion of both sides of the flame retardant containing PSA layer, and the flame-retardant containing PSA is a foam as claimed. The

Examiner relies on Akihiro for the metal hydrate and the amounts of metal hydrate since Akihiro teaches an adhesive that includes ammonium polyphosphate and aluminum hydroxide (metal hydrate). The Examiner asserts that it would have been obvious to a PHOSITA at the time the invention was made to add the flame resistant component such as ammonium polyphosphate and aluminum hydroxide (metal hydrate) in the amount taught by Akihiro in the adhesive of Masaki, motivated by the desire to further enhance the flame-resistance characteristics of the adhesive tape of Masaki and provide an adhesive tape having excellent adhesion. The Examiner also admits that Masaki as modified by Akihiro is silent as to teaching a multilayer adhesive. However, the Examiner points to Moon as disclosing a multilayer adhesive although Moon is silent as to teaching halogen in his adhesive tape. The Examiner notes that Applicant's presently claimed invention does not exclude a PSA tape wherein both adhesive layers are formed of [the]same acrylic polymer. The Examiner states [F]urther, "If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of", applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention".

The Applicant respectfully traverses for at least the following reasons. Independent claims 12 and 19 have been amended as noted above to reinstate the transitional phrase "comprising" for all of the "consisting essentially of" transitional phrases in the claim and to expressly exclude a metal hydrate compound from the second pressure-sensitive adhesive layer. It is the Applicant's position that the Examiner has not shown that the combination of Masaki in view of Akihiro and Moon teach or suggest all of the limitations of Applicant's amended independent claims 12 or 19 for at least the following reasons. With respect to claim 12, the Examiner has not shown that Masaki, Akihiro, and Moon teach a flame-retardant acrylic PSA tape or sheet that comprises a base material, a first PSA layer having a halogen-free flame retardant-containing first acrylic polymer containing units derived from a mixture that has an alkyl(meth)acrylate monomer, a nitrogen-containing monomer, and a metal hydrate in the stated proportions and as stated in claim 12 and a second PSA not containing a metal hydrate compound but comprising a second acrylic polymer containing units derived from an alkyl(meth)acrylate monomer and a carboxyl group-containing monomer and wherein the second pressure-sensitive adhesive layer is that outer layer of a multilayer sheet. As admitted by the

Examiner, Masaki teaches a polymer formed from a mixture of a (meth)acrylic ester monomer and one or more of copolymerizable monomers that are copolymerized with the (meth)acrylic ester monomer and can contain a nitrogen-containing monomer and a carboxyl-containing monomer. But, as also admitted by the Examiner, Masaki is silent as to a multilayer adhesive as required by Applicant's amended independent claims 12 and 19. Additionally, the Examiner has stated that Akihiro discloses a flame-retardant PSA tape with excellent adhesion that includes ammonium polyphosphate and aluminum hydroxide (a metal hydride). The Examiner admits that Masaki as modified by Akihiro is silent as to teaching a multi-layer adhesive tape. The Examiner is relying on Moon for this teaching.

The Examiner asserts that Moon teaches tapes that comprise more than one PSA layer and that the PSA layers may comprise similar or different adhesive compositions. Moon does not teach or suggest PSAs that incorporate halogen-free flame-retardants. The Applicant asserts that the Examiner has not shown that Masaki teaches or suggests a PSA derived from a mixture comprising an acrylate, a nitrogen-containing monomer, and a metal hydrate as required by Applicant's claim 12 for the first PSA layer or a PSA derived from a mixture comprising an acrylate and a carboxylate-containing PSA, but not containing a metal hydrate compound, as required by Applicant's claim 12 for the second PSA layer where the first PSA is disposed upon the base material, and where that second PSA is in contact with at least one side of the first PSA layer and where the second PSA layer is the outer layer of a multi-layer adhesive sheet. Akihiro does not add to the teaching of Masaki to get all of the limitations of Applicant's amended claim 12. Moon, which is the only references which the Examiner admits teaches multi-layer adhesives, also does not teach these limitations required by Applicant's amended claim 12. Since the combination of Masaki, Akihiro, and Moon do not teach or suggest all of the limitations of Applicant's amended claim 12, the Examiner has not made a *prima facie* case of obviousness as required by MPEP § 2143.04. Therefore, the rejection of Applicant's amended claim 12 is improper and should be withdrawn.

Claims 13-18 and 27 depend upon claim 12 and add further limitations thereto. Since claims 12 is now patentable, likewise so are claims 13-18 and 27.

Amended claim 19 is essentially identical to amended claim 12 except that the first PSA contains an alkyl(meth)acrylate monomer, a carboxyl group-containing monomer, and a metal

hydrate and the second PSA contains an alkyl(meth)acrylate monomer and a nitrogen-containing monomer, but does not contain a metal hydrate compound. But, as in the case above, the Examiner has not shown that Mayaki in view of Akihiro and Moon teach or suggest all of the limitations of Applicant's amended claim 19. For at least this reason, the Examiner has not made a proper *prima facie* case of obviousness as required by MPEP 2143.03, the rejection of amended claim 19 is improper and should be withdrawn.

Claims 20-25 and 28 depend upon claim 19 and add further limitations thereto. Since claim 19 is now patentable, likewise so are claims 20-25 and 28.

The rejection of claims 12-25 and 27-28 under 35 U.S.C. § 103(a) as purportedly being unpatentable over Masaki et al. (JP 10-077308) in view of Akihiro et al. (JP H2000-230162A1) and Moon et al. (US 4,988,742) has been overcome and should be withdrawn.

### **Telephonic Interview**

The Applicant wishes to thank Examiner Desai and his supervisor, Examiner Shosho for the brief telephonic interview which was held on Thursday, September 3. During the interview, Examiner Desai suggested that exclusionary language in which the second pressure-sensitive adhesive layer in claims 12 and 19 "does not contain a metal hydrate compound" might put the case in condition for allowance. Examiner Desai also informed the Applicant that support for an amendment for including this exclusionary language was in the specification so he would accept a claim with this language. The Applicant asked if Examiner Desai would be willing to make such an amendment as an Examiner's amendment and allow the case. Examiner Shosho informed the Applicant that such an amendment would require a new search and thus a Request for Continued Examination would be required by the Applicant in order for the Examiner to enter such an amendment.

Examination and reconsideration of the application as amended is requested.

Respectfully submitted,

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Date

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